

**MINUTES  
CALIFORNIA TRAFFIC CONTROL DEVICES COMMITTEE (CTCDC)  
MEETING**

**Oakland, December 5, 2002**

The fourth and last CTCDC meeting of 2002 was held in the Caltrans Office in Oakland, on December 5, 2002.

Chairman Jim Larsen opened the meeting at 9:00 a.m. with the introduction of Committee members and guests. Albert Yee, Deputy District Director, Traffic Operations, welcomed the CTCDC members for holding the meeting in their Office and guests for their participation. The following members, alternates and guests were in attendance:

<b>ATTENDANCE</b>	<b>ORGANIZATION</b>	<b>TELEPHONE</b>
<b>Members (Voting)</b>		
Jim Larsen Chairman	CA State Association of Counties County of Tulare	(559) 733-6291
John Fisher Vice Chairman	League of CA Cities City of Los Angeles	(213) 580-1189
Gerry Meis	Caltrans	(916) 654-4551
Farhad Mansourian	CA State Association of Counties Marin County	(415) 499-6570
Julie Page (Alternate Member)	CHP	(916) 657-7222
Ed von Borstel City of Modesto	League of CA Cities	(209) 577-7222
Dwight Ku (Alternate Member)	California State Automobile Association	(415) 241-8904
Richard Backus	Auto Club of Southern California	(714) 885-2326

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**ALTERNATES**

	<b>ORGANIZATION</b>	<b>TELEPHONE</b>
Jacob Babico	CA State Association of Counties San Bernardino County	(909) 387-8186

John Presleigh Santa Cruz County	CA State Association of Counties	(831) 454-2160
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Gian Aggarwal	League of CA Cities City of Vacaville	(707) 449-5349
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**ATTENDEES****ORGANIZATION****TELEPHONE**

Bill Wald	Caltrans, HQ-ITS	(916) 651-9048
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Michael Harrison	LightGuard System, INC	(707) 542-4547
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Johnny Bhullar	Caltrans/Traffic Ops	(916) 654-7312
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Christopher Bailey	City of Vacaville	
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Si Lau	City of Berkeley	(510) 981-6403
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Gary Tsutsumi	City of Stockton	(209) 937-8611
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Nevin Sams	Caltrans D5	(805) 547-3017
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Dario Senior	Caltrans D5	(805) 542-4793
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Jerilyn Struven	Caltrans D4	(510) 286-4613
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Dennis Dunn	Sacramento County	(916) 875-5415
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Joe Jeffery	Road- Tech Safety Services	(530)-676-7797
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Stephen Ford	Mendocino County	(707) 463-4351
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Roger Bazeley	SF PTA, School Safety Improvement Project	(415) 693-3652
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### MINUTES

Adoption of August 22, 2002 CTCDC meeting Minutes.

**MOTION:** Moved by Dwight Ku, seconded by Gerry Meis, to adopt the minutes of the CTCDC meeting, held on August 22, 2002 in San Diego. Motion carried 8-0.

### PUBLIC COMMENTS

Chairman Larsen asked for any public comments related to the items that will not be discussed as an agenda item.

Gary Tsutsumi, City of Stockton, submitted the first and final report to the Committee on experimentation conducted with the Pedestrian Countdown Signal Heads (PCSHs). Gary also gave a brief summary on the experimentation with PCSHs. Gary noted that the field survey conducted by the City staff and feedback from schools, businesses and residents in the test area indicated that the PCSHs have had a positive effect on traffic signal operations. All of the pedestrians surveyed stated that they understood the meaning of the countdown timer and felt that it was more helpful than the standard "flashing hand" signal heads. Gary added that based on their experience with the devices, the City of Stockton recommends that the PCSHs be adopted as a standard traffic control device. When this device becomes standard, the City plans to install PCSHs on all new traffic signals if pedestrian provisions are warranted.

There were no other public comments.

**AGENDA ITEMS (Public Hearings)**

**02-7 Push Button For Crosswalk Warning Lights (R62E) Sign, Cross with Caution**

Chairman Larsen noted that this item is a continuation from the last meeting and asked Gerry Meis to brief the Committee and audience about this item.

Gerry Meis noted the proposed sign will be installed where the “in-roadway warning lights” (IRWLs) activated by pedestrians are using a push button. The message (cross with caution) will remind pedestrians about their responsibility while crossing the roadway. During the last meeting, Committee members suggested replacing the words, “watch for traffic” with “cross with caution”, and the visually impaired suggested adding the same message in Braille. The revised message on the sign has incorporated the suggestions that were made during the last CTCDC meeting. Gerry further added that the proposed sign is open for discussion and that further modifications could be made if they are meaningful.

Chairman Larsen opened the public hearing.

Gian Aggarwal, Alternate member, stated that the message is too long. He suggested that the message should be short and concise. He recommended changing the message from “Push Button for Crosswalks Warning Lights, Cross With Caution” to “Push Button for Crosswalks.”

Chairman Larsen asked for other comments from the public. There were none. Chairman Larsen closed the public hearing and opened the discussion to Committee members.

Gerry Meis partially agreed with the previous comment and added that the sign is not for the motorists, it is for the pedestrians and they should have enough time to read the message.

Chairman Larsen commented that in other situations, when a pedestrian uses the push button, they receive the message to proceed or stop, for example the pedestrian signal heads. In this case, the messages is for the motorists (flashing IRWLs) and there is no message for the pedestrian except “cross with caution”.

Farhad Mansourian commented that even though the message is wordy, it is not for the motorists, it is for the pedestrians and they would have adequate time to read it. The lights are warning the motorists and the sign alerts pedestrians and reminds them of their responsibility to “cross with caution.” Farhad further added that although the public agencies are vulnerable to sue in any case, it is the responsibility of an agency to provide enough information for safe traffic movements.

Dick Backus noted that the sign could be made more meaningful by using the word “cross with caution” below the two-way arrow. The message will then break into two sentences and it will be more comprehensible for the pedestrians.

John Fisher agreed with Dick’s suggestion and proposed a change to **“Push Button For Pedestrian Warning Lights”**, then a **“Two Way Arrow”** followed-up with **“Cross With Caution”**.

Chairman Larsen asked for the other comments. There were none.

**MOTION:** Moved by Farhad Mansourian, seconded by John Fisher, recommending Caltrans to adopt the sign, “Push Button For Pedestrian Warning Lights, Two way Arrow, Cross With Caution.”

Chairman asked for discussion on the motion. John Fisher noted that the message in Braille should be the same as in English. Dwight Ku also suggested the Braille message should be a copy of the English message. Farhad added that if there is a problem in accommodating the message on the sign as recommended, then Caltrans would bring the issue back to the Committee for further discussion.

Motion carried 8-0. **ACTION:** Item completed.

**02-8 Fines Higher (Red Light Violation Fine) Sign**

Chairman Larsen noted that this item is also a continuation from the last meeting and asked Gerry Meis to brief the Committee and audience about this item.

Gerry Meis briefed the Committee that during the last meeting, the County of Santa Clara requested experimentation with the "Red Light Violation Fine" sign. The Committee recognized that this type of sign has been installed by public agencies in different colors and formats. Committee members acknowledged that experimentation is not needed for this sign and recommended that Caltrans develop standards and specifications for the sign. Gerry further added that Caltrans has developed standards and specifications, which were included in the agenda packet for the review and hearing.

Chairman Larsen opened the public hearing. There were no comments. Chairman Larsen closed the public hearing and opened discussion among Committee members.

There was discussion back and forth between the Committee members and audience about the color of the sign. An unidentified audience member suggested that this is a warning message and the color should be "black on yellow". Another unidentified audience member suggested that since the sign can be installed only by passing a local ordinance, it should be proposed as a regulatory sign.

Gerry Meis noted that the proposed color is consistent with the MUTCD Revision 2. Gerry further added that the existing sign, which is not consistent, should be replaced with a standard sign as they near the sign's useful life.

John Fisher commented on the second sentence of the policy statement, "*This sign may be placed on State highways with an Encroachment Permit when requested by the local agencies.*" By policy public agencies are required to have an Encroachment Permit when they install signs on State highways. Therefore, the second sentence in the policy statement is redundant and should be deleted.

Gerry Meis agreed with John's comments and asked if the words Encroachment Permit should be deleted and the second sentence of the policy amended to read as "*This sign may be placed on State highways when requested by the local agencies.*"

John agreed with Gerry's suggestion.

Jacob Babico asked why local agencies are responsible for the installation of signs on the State highways and not Caltrans.

Farhad Mansourian stated that it depends upon who initiates a request. If Caltrans initiates a request and a local agency passes the ordinance, then Caltrans installs the sign. If a local agency initiates a request, then the local agency is required to get an Encroachment Permit to install that sign.

Roger Bazely, Parent Teaches Association, San Francisco, working with the San Francisco School District, suggested a graphic message is a better way to communicate with pedestrians than a verbal message. He added that the red light violation signs installed in the San Francisco illustrate a "signal head" graphic with the "fine amount", and they are very effective. He suggested using a similar format.

There was a discussion on Roger's suggestion.

John Fisher asked if you see a symbol displaying Green, Yellow and Red Circles, with a "fine amount" what would that mean to a motorist. What symbol represents the actual violation.

Roger stated that the red symbol is a violation.

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Gerry Meis stated that the Federal Highway Administration (FHWA) is strict on States developing their own symbols without going through the federal process. They only want symbols to be used that are recognized at the national level or reviewed and approved at the national level and adopted by the FHWA.

Johnny Bhullar also added that the FHWA does not encourage States to develop their own sign symbols without going through the federal process.

Chairman Larsen asked for other comments. There were none.

**MOTION:** Moved by Gerry Meis, seconded by John Fisher, recommended Caltrans adopt the proposed sign with an amendment to the policy deleting the words, "Encroachment Permit".

Motion carried 8-0.

**ACTION:** Item completed.

## **REQUEST FOR EXPERIMENTATION**

### **02-10 Pedestrian Countdown Signal Heads (PCSHs)**

Chairman Larsen briefed the Committee and audience that the PCSHs item is not an experimentation request. The purpose of this item on the agenda was for the Committee to review the ongoing experiment and find ways to bring the item to a close. He pointed out the proposed MUTCD Revision 2 has included text on the PCSHs, which is similar to the recommendations provided to the experimental agencies by the Committee. At this point, seven public agencies have installed these devices under experimentation and there is interest shown by others to install these devices. At some point, the Committee will make recommendations that Caltrans adopt this device in California. Chairman Larsen asked for input from the Committee members.

Gerry Meis agreed with Jim's articulation and noted that he would like to know at some point if California wants to adopt the MUTCD text or if different standards should be developed.

John Fisher questioned if the language proposed in the MUTCD Revision 2 is adequate. Data submitted to the committee shows that the devices are helpful in improving pedestrian crossing. This morning, Garry Tsutsumi, City of Stockton, suggested that PCSHs are a useful device on wider roadways, because information given on the countdown is helpful for a pedestrian to make the decision whether to proceed or not. The data also indicated that more pedestrians are stepping off the curb during the "flashing hand" (don't walk), and at the same time, more pedestrians are completing their cross within countdown signals. He suggested seeing more data and input from the experimental agencies. That may trigger the use of different guidelines in California compared to the MUTCD Revision 2. The proposed text in the MUTCD was included in a rush, and California might come up with better guidelines.

Farhad Mansourian shared that there are public agencies under the impression that this is an approved traffic control device and they are installing these countdown devices. He further added that there are vendors too, who are telling cities that this is an approved traffic control device. He asked the Committee to communicate with local agencies to inform them that this is not an approved traffic control device and at the same time, the Committee should look into ways to come up with final guidance.

Gary Tsutsumi stated that the PCSHs were programmed so that the countdown display begins at the start of the flashing "upraised hand" (Don't Walk) interval. The Traffic signal controller was programmed in such a way that the countdown timer reaches "zero" at or prior to the beginning of the yellow vehicle clearance interval. The City of Stockton uses a one-second "all red" interval at the end of the yellow interval. Therefore, the pedestrians are provided the "yellow clearance" interval and "all red" interval in addition to the "walk" and "walk clearance" interval prior to a conflicting phase receiving the green indication.

Dennis Dunn, County of Sacramento, stated that the County of Sacramento was the first local agency to install PCSHs and submitted their final report a few years back.

Gerry Meis noted that the Committee has not received any final report from the County of Sacramento. The only information the County has submitted to this Committee was that the County decided to terminate collection of the data due to the shortage of personnel and that the County would submit a final report after getting data from other jurisdictions who are experimenting with PCSHs.

There was lengthy discussion by the Committee on how to inform public agencies that the countdown is not an approved traffic control device yet. There was an opinion to issue "interim guidelines" with the help of agencies conducting experimentation with countdown signals. Others asked about the legality of the "interim guidelines."

The Committee suggested including the following statement in the minutes:

- The pedestrian countdown signal head is not an "officially approved traffic control device" in California.
- The Federal Highway Administration also has a draft text in the MUTCD Revision 2, on PCSHs, under Section 4E.07. The final text is anticipated to be published in the latter part of 2003.

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- Local agencies are encouraged to receive approval from the CTCDC, if they plan to install PCSHs or wait for the Committee to issue a final decision on completion of the on-going experimentation.

**Action:** Item Tabled



## **02-14 Speed Feedback (Radar Speed) Sign**

Chairman Larsen asked Farhad Mansourian to introduce this item.

Farhad noted that the County of Mendocino has requested permission to conduct an experiment using "Electronic Speed Display" signs as non-standard traffic control devices to determine their effectiveness in reducing vehicle speeds in rural school zones. The County is particularly concerned about speeding in school zones on rural roads. Farhad introduced Steve Ford, Civil Engineer, County of Mendocino, and asked him to brief the Committee about their request.

Steve Ford stated that the County of Mendocino has requested a grant from the Office of Traffic Safety (OTS), State of California, to install "Electronic Speed Display" signs. The OTS wants to make sure that the County receives approval from the CTCDC and FHWA before they release the funding. The County is considering 3M's "Electronic Speed Display" sign for installation in school zones. The sign will supplement the "Installation C" (school assembly sign) and may be placed above or below Installation C. The County has planned to install signs at three school locations. There would be a fourth location in the near future. The County is collecting preliminary data and plans to install signs in late December 2002 or in January 2003, since OTS wants data before October 2003. Steve asked the Committee for approval for the experimentation.

Chairman Larsen asked the Committee members if they have questions for Steve.

John Fisher inquired whether the speed feedback sign has a white or yellow background.

Steve responded that the sign would have a white background.

Jacob Babico stated that their jurisdiction had experimented with a smaller version of the sign and motorists did not pay attention.

Steve stated that the sign would be the same size as the school speed limit sign.

Roger Bazely inquired about whether there are marked or unmarked school crossings, and if there are stop signs or signals present at the school crossings.

Steve responded that one of the schools does not have any marked crossing and others do have marked crosswalks without the signals/stop.

Juli Page inquired about the operations timing of the speed feedback sign.

Steve responded that he has not worked out the timing yet, but it would be consistent with the school's hours.

Garry Tsutsumi, City of Stockton, stated that they have installed the sign from a different vendor, not a 3M sign. The sign was installed on a separate post and supplemental to the installation C (school crossing signs). The sign blacks out during non-school hours. The sign has a positive affect on reducing speed in school zones.

Roger Bazely briefed the Committee about the efforts he had used in San Francisco and Ventura County to reduce speeds in school zones by using radar speed display signs. He added that this type of sign would be helpful in downhill areas also.

Chairman Larsen pointed out to Committee members that there is a text on the speed display sign in the proposed Revision 2 of the MUTCD, under Section 2B.11.

Gerry Meis supported the County of Mendocino's approach and commented that the data collected by the County would be helpful for the Committee to reach a decision about this device.

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Dwight Ku inquired whether, in order to save time for Mendocino County, there is anything preventing the Committee from giving authorization for the fourth location, subject to the written notification addressed to the Committee Chairman?

Chairman Larsen stated that could be done and asked for other comments. There were none.

**MOTION:** Moved by Farhad Mansourian, seconded by Dwight Ku, to authorize experimentation with “speed feedback” signs for three school locations. The fourth location will require written notification from the County, to the Committee Secretary addressed to the Committee Chairman.

Chairman Larsen commented that the sign should be consistent with the experimentation approved for the City of Garden Grove during the August 22, 2002 CTCDC meeting. The speed feedback display will be “yellow LED on a white background.”

Motion carried 8-0.

**ACTION:** Item approved for experimentation.

## **02-15 Radar Guided Dynamic Curve Warning System**

Chairman Larsen asked Gerry Meis to introduce the "Radar Guided Dynamic Curve Warning System" (DCWS). The request was submitted by Caltrans District 5 (San Luis Obispo) Office.

Gerry Meis stated that the California Department of Transportation requests permission to conduct experimentation using a "Radar Guided DCWS". Gerry noted that this type of sign has been used, but data has not been collected to show whether the sign has contributed to improving the safety/operation of the highway. District 5 has volunteered to collect before and after data and submit the information to the CTCDC with recommendations. Gerry introduced Dario Senior, Caltrans District 5 Office, and asked him to brief the Committee about this proposal.

Dario stated that many motorists heading southbound on Route 17 between San Jose and Santa Cruz are descending the summit at a high rate of speed and are not able to judge the tight radius curve that follows a tangent segment of the highway. The collision rate for this curve over the last five years has been higher than the statewide average rate for similar curves. To inform the motorist about their speed, the Radar Speed DCWS will be installed. This is a smart sign and could be programmed with various messages. The sign will be linked with the District 5 Traffic Management Center and it could also be linked with the District 4 Traffic Management Center if needed. The "45 mph Curve Ahead" message will be displayed and if a vehicle is going over the advisory speed limit, the sign will display "vehicle speed--". Dario added that the District will monitor the operation closely and if changes are needed, they would be made accordingly.

Chairman Larsen asked whether the same message would be repeated and that no animation would be displayed on the sign.

Dario responded that the message will be "Curve Ahead" followed-up with "45 mph" advisory speed and if a vehicle is over 45, the sign will display, "vehicles actual speed" with "your speed" display message.

John Fisher commented that it is actually a large version of the speed feedback sign. John inquired whether the sign is capable of being programmed in such a way that if an aggressive driver wants to see how fast they could negotiate the curve. In that type of situation, could the message displayed be "slow down" instead of the vehicle's actual speed.

Dario responded that the sign could be programmed the way the operator wants. The sign could be programmed to display the speed only within a certain range.

Chairman Larsen noted that since the District has the capability of recording the operation of the sign, would it be possible at a certain phase of the experiment for the operation of the sign to be shown to the Committee?

Dario responded that could be achieved.

Farhad Mansourian noted that the picture included in the agenda packet shows that the proposed sign is ahead of the stationary curve warning sign. This will not provide the right message. The motorist first needs to see the curve sign and then the supplemental information. The stationary curve warning sign should be either ahead or offset to the Radar Speed DCWS.

Dario responded that the actual location would be determined in the field. The picture in the agenda packet was superimposed on an aerial.

John Fisher asked whether the before and after experimentation data would measure the speed at the beginning of the curve. What type of device or devices will be used to measure the speed? Are there ways to collect speed data without being conspicuous to the motorist?

Dario responded that the speed survey will be one part of the study and a radar gun will be used for this. The speed survey is done in such a way that motorists are not aware of the activity and they travel at their normal speed or flow.

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Roger Bazely inquired whether there is the ability to use different messages such as, slow, icy condition, etc.

Dario responded that the system has the capability to program any message. However, the main message will be "curve ahead" followed-up with "45 mph" advisory speed display.

Dick Buckus asked if there were a number of vehicles speeding which vehicle would be picked for the speed display.

Dario stated that they would program the display either to take the average speed or the highest speed. There will be a number of adjustments throughout the process as they learn.

Chairman Larsen asked for other comments. There were none.

**MOTION:** Moved by Gerry Meis, seconded by Julie Page, to authorize experimentation with the "Radar Speed Dynamic Curve Warning System" as requested by the Caltrans District 5 Office.

Motion Carried 8-0.

**ACTION:** Item approved for experimentation.

**02-17 Speed Feedback (Radar Speed) Sign**

Gerry Meis, sponsor of this item, withdrew the experimentation request submitted by the Caltrans District 5 Office.

**00-3     Jake Brake Sign**

Jim Larsen asked Gerry Meis to update the Committee about the Jake Brake sign report submitted by the Police Department, City of Auburn.

Gerry Meis stated that “Jake Brake” is a trade name, and the company pointed out the violation of the use of their trade name. Therefore, the sign installed in the field was changed from “Jake Brake” to “Engine Brake”.

Gerry pointed out the report that was included in the agenda packet. The Police Department conducted random interviews of people who live in the immediate area of Route 80 and Route 49 which is most affected by traffic noise. Half of the individuals interviewed said that the noise from engine brakes was about the same, and the other half said the noise was less. The pre and post noise data indicated a reduction in the noise level. Gerry further stated that he does not believe the sign is effective in changing truck driver behavior. Gerry suggested to table this item until more data is available for the committee to make a final decision. Other agencies have shown interest in installing this sign on an experimental basis.

The Committee agreed to table this item.

**ACTION:**        Item Tabled.

## **99-18 Ground Mounted LED Lights On Stop Bars**

Chairman Larsen asked Gerry Meis to update the Committee on this item.

Gerry Meis noted that the City of Anaheim has submitted the fifth and final report on LEDs installed at the limit line of a signalized intersection. The City made mixed recommendations. The use should be limited to unique locations. The City also pointed out that they are expensive to install and difficult to maintain. Gerry further added that he does not recommend the use of LEDs at signalized intersections, except in unique conditions, such as the one that existed in the City of Anaheim. He commented that the future use of LEDs at signalized intersections should be brought before the Committee.

Chairman Larsen inquired whether the condition of the intersection has changed as compared to when LEDs were originally installed.

Farhad Mansourian suggested that the Committee could accept the report and request the City to attend the next CTCDC meeting to share their experience with the device.

Gerry Meis stated that if the Committee does not recommend adoption of the device, then the City is obligated to remove the LEDs as outlined in the "Experimental Guidelines".

Roger Bazely stated that the installation of LED IRWLs at signalized intersections would confuse motorists.

Mike Harrison, LightGaurd, stated that during the two-year test period, there were no reported traffic accidents compared to six accidents in the 14 months prior to installation. The report indicated that LED IRWLs had significantly reduced the "stop line" violation from 31% to 25% of the vehicles. Vehicles running the red light have been significantly reduced. Mike suggested the system should be recommended for installation where red light running problems exist, and that his company requests the Committee make recommendations to Caltrans to develop guidelines. The guidelines would eliminate the experimental request from the CTCDC, and agencies would be able to receive approval or denial by writing to Caltrans, as was done for IRWLs at crosswalks.

Chairman Larsen asked whether this report was submitted to the FHWA. If not, this could be submitted as a completed experiment.

Mike stated that there are several cities interested in installing LED's where red light running problems exist. All new requests could follow the FHWA process.

John Fisher asked whether conditions changed or geometric improvements were made at the intersection during the experimentation process.

Mike responded that there were other improvements that took place simultaneously, but red light violations would not have been impacted by the other improvements. Mike further added that he is not sure whether the "Disney Tram" was still running through that intersection.

John Fisher commented that since conditions have changed and if the City of Anaheim would like to continue the use of LED's, they should conduct the experiment all over again and include FHWA in the process. They can simply disconnect the LEDs, collect before data, and then reconnect to collect the after data. This would show if there are improvements by using LEDs to reduce red light running violations.

Mike responded that there are other cities which have intersections with more problems than the City of Anaheim, where the device was originally installed.

Chairman Larsen agreed with John's comments and added that this would extend the experimentation process in California and at the same time the City could get approval from the FHWA.

Mike asked about the process for other cities that wished to use LEDs at controlled intersections.

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Chairman Larsen responded that all new requests should come to the Committee and the individuals should present their justification to the Committee. He further commented that he is not prepared to recommend this to be a traffic control device in California. If the City of Anaheim wishes to continue the use of LEDs at the controlled intersection, they could further pursue the experimentation and involve FHWA as the Committee discussed earlier.

Farhad Mansourian suggested inviting the City of Anaheim during the next CTCDC meeting so they would have an opportunity to discuss their report. Farhad further added that their presence would clear the issue, whether or not they would like to keep the devices in place and that they might be willing to collect data as John and Jim suggested.

Dick Backus noted that the problem at the intersection was that motorists were stopping beyond the stop limit line and interfering with the Disney Tram and by using the LED, the problem was reduced.

Chairman Larsen stated that the City of Anaheim should be contacted and invited to the next CTCDC meeting to provide their opinion on the experimentation and whether they would like to pursue experimentation at the national level.

**Note: The Committee Secretary was directed to contact the City of Anaheim to receive an update on LEDs and request them to attend the next CTCDC meeting. The City has confirmed that the LEDs have been removed and they will attend the next CTCDC meeting to provide their experience on LEDs used at a controlled intersection.**

**ACTION:** Item to be continued.



**02-12 WHEN CHILDREN ARE PRESENT (R72) SIGN**

Chairman Larsen noted that this item is a continuation from the August meeting and asked Gerry Meis to update the Committee.

Gerry Meis noted that a Judge in Santa Clara County has made a comment that the sign "speed limit 25 mph, when children are present" is not consistent with the intent of California Vehicle Code (CVC), Section 22353 (b). During the August 2002 meeting, the Committee suggested that Caltrans review the MUTCD for guidance and come up with suggestions that are consistent with the CVC. Gerry added that the current MUTCD has a similar sign and California is consistent with the MUTCD. There are two alternatives in the agenda packet for your review. Gerry commented that he personally does not like Alternative 1. It is too wordy. Gerry added that there was only one complaint within the past 5-7 years and suggested not making any change to the current sign. He stated that sometimes it is not practical to come up with a sign message that exactly illustrates the CVC.

Chairman Larsen asked for comments from the Committee members and audience.

Farhad Mansourian commented that he spoke to their legal council and they did not see any problem with the current sign. Farhad agreed with Gerry's analogy that there is only one complaint and the current sign is adequate.

John Fisher agreed with previous speakers and added that the signs are always an approximation or a condensed version of the law.

Roger Bazely suggested that the 25-mph sign should be applicable during school hours from Monday to Friday and the sign hours should be consistent with the school hours.

Chairman Larsen suggested that there are many different activities involved with schools, such as Saturday school, make-up school and PTA meetings.

Julie Page, Committee Member, Representing the California Highway Patrol, commented that there was one incident in one area and one judge had made that comment. She does not see this as a major problem, except in the one incident and suggested not changing the current sign. If the sign is working, there is no need to make a change.

Chairman Larsen observed that all the comments were to leave the sign as it is, and no further discussion was needed.

## **02-16 Traffic Signal Warrants I & II**

Chairman Larsen asked Jacob Babico, Alternate Member, CTCDC, to address the traffic signal warrants issue.

Jacob Babico noted that the current Traffic Manual, "Signal Warrants I & II" do not have footnotes as were listed in the 1991 Traffic Manual. The footnote allows adding left-turn traffic volumes from the major street to the minor street volume to satisfy the Signal Warrants for the installation of signals. It also increases the delay time for the left-turn movement from the major street because of the heavy volumes of the opposing traffic. SANBAG supports having the option available in the Signal Warrants 1 & 11.

Chairman Larsen inquired whether the Manual on Uniform Traffic Control Device (MUTCD) has a similar option.

Jacob noted that the MUTCD does not include left-turn volume of the major street to the minor street volume in the signal warrants study.

Bill Wald of Caltrans told the Committee that the footnote "Heavier left-turn movement from Major Street included into the Minor Street volume when left-turn phasing is proposed" was deleted from the current Traffic Manual due to the following reasons:

- The MUTCD does not consider heavier left-turn movement from Major Street into the Minor Street volume when left-turn phasing is proposed.
- The other reason was the misuse of the left-turn volume to justify signal warrants when they were not justified.

Chairman Larsen noted that this could be discussed during the California Supplement development process.

Jacob Babico reiterated that with the deletion of the note, agencies cannot justify Warrants I & II, which are the two main warrants for justification of the signals. Jacob advocated that there are numerous intercessions in San Bernardino County where the left-turn traffic faces excessive delay, because signals cannot be justified. The option that was available in the 1991 Traffic Manual was a good option to improve the operation of an intersection.

John Fisher inquired whether SANBAG has records showing excessive delay for the left-turn movement because signals cannot be justify due to the deletion of the note. John added that if SANDBAG identified a problem and it is documented by a traffic study, that would be helpful for this Committee to recommend modifications or even an additional warrant. That information could also be submitted to the FHWA for reevaluation of the current signal warrants system. Over time, signal warrants have been added to address operational and safety problems. If there is a problem under current warrants, more information would be helpful in addressing that problem.

Chairman Larsen agreed with John's suggestion and asked Jacob to come up with evidence that shows there are intersections that could be improved with the 1991 Traffic Manual version.

Jacob stated that he would submit evidence to the Committee during the next meeting.

The Committee Secretary will contact Jacob to find out if there is information available for the Committee to review. In that case, the item will continue on the agenda under "Discussion Items."

**Two Day Meetings**

This item was placed on the agenda to discuss whether there is a need for having a two-day CTCDC meeting. Frequently in the past, the meeting agenda was too long and there was not enough time to discuss all the items properly. A few times, items were deferred for the next meeting. The Committee members suggested that the length of the meeting should be determined based upon the Items on the Agenda. If the CTCDC Secretary believes that the agenda for a particular meeting could not be heard properly during a one-day meeting, then the Secretary would discuss this with the Chairman of the Committee. If the Chairman agreed, then the meeting could be extended for a second day. It would be determined based on need.

## **INFORMATION ITEMS**

### **99-11 MUTCD Adoption by Caltrans**

Johnny Bhullar updated the committee on the status of the MUTCD adoption by Caltrans. He distributed to committee members and the public, a handout containing the status outline. He informed the committee that Caltrans had completed a thorough review of the entire Traffic Manual, Caltrans Traffic Sign Specifications, MUTCD 2000, Caltrans new policies, CTCDC's Light Rail Traffic Manual, Caltrans Highway Design Manual Chapter 1000 (Bicycles), Caltrans Maintenance Manual, Caltrans Ramp Meter Design Manual, Caltrans HOV Guidelines, etc. This review consisted of weekly (2 to 3 times per week) meetings with Caltrans experts and FHWA to discuss items identified in a preliminary review. He further stated that Caltrans was currently working on the individual parts of the Supplement, which include writing the text portion, modifying, revising and creating new figures and graphics and incorporating policies from the various manuals.

Johnny Bhullar then apprised the committee on what needs to be accomplished. He stated that the draft text for each part needs to be completed and submitted to Caltrans and the CTCDC for review. The plan is to complete the draft text for each part on a monthly basis (see attached schedule) starting in January and being completed by June of 2003. The draft text for each part would be discussed in a series of CTCDC workshops. The draft text for each part will be amended per review and posted on the MUTCD Supplement web site. The Supplement would then be finalized and the MUTCD will be adopted for California.

Johnny Bhullar informed the committee that Caltrans would be requesting FHWA approval of Caltrans MUTCD adoption plan. This adoption plan was included in the handout and has a timeline for each part's completion with the completion of the entire Supplement and adoption of the MUTCD by December of 2003.

**02-13 PROPOSED CHANGES TO CHAPTER 9 – TRAFFIC SIGNALS AND LIGHTING OF THE TRAFFIC MANUAL**

Chairman Larsen noted this is an information item and asked John Fisher to provide an update on the proposed editorial changes to Chapter 9 (Traffic Signals and Lighting) of the Traffic Manual.

John Fisher indicated that he worked with Devinder Singh, Johnny Bhullar and Bill Wald to incorporate suggestions and comments made during the August 22, 2002 CTCDC meeting. John appreciated Caltrans efforts, especially Bill Wald, ITS Branch, working with him to incorporate comments and suggestions. John added that Caltrans has incorporated all the editorial changes and has posted changes to the website, therefore, no further action is needed on this item.

Chairman Larsen noted that during the last meeting a “motion” was adopted requesting Caltrans to incorporate editorial changes as suggested. If there was any disagreement on the comments and suggestions, Caltrans should bring back those disagreements to the Committee. Since there is no disagreement, the item should be considered completed.

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**00-1     Bicycle Pavement Markings**

Due to early ending of the CTCDC meeting, the item was not discussed. The item will be placed on the agenda for the next CTCDC meeting.

**02-9 MANDATORY REQUIREMENT OF ACCESSIBLE PEDESTRIAN SIGNALS (APSS)**

Chairman Larsen noted that during the last meeting a recommendation was made to establish a Sub-Committee to develop guidelines for Accessible Pedestrian Signals system. John Fisher, Vice-Chairman, CTCDC, agreed to chair the Sub-Committee. The other members are Gerry Meis, Farhad Mansourian, Ed von Borstel and Jacob Babico. Gene Lozano, Helen Elias and Ezio Elviti will be representing the Visually Impaired community.

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**NEXT CTCDC MEETING**

The next meeting will be held on March 13, 2003, at 320 W 4<sup>th</sup> Street (Carmel Room A), Los Angeles 90012. There will be a Sub-Committee meeting in the same facility on March 12, 2003.

**ADJOURN**

The meeting was adjourned at 2:35 p.m.